REMARKS

Interview request

Applicants respectfully request a telephonic interview after the Examiner has reviewed the instant RCE response and amendment. Applicants request the Examiner call Applicants' representative at (858) 526-0376, as noted below.

Status of the Claims

Claims 43-79 are pending. Claims 44, 45, 48-50, 54, 57-64, 70-71 and 76 are withdrawn. Accordingly, claims 43, 46-47, 51-52, 55-56, 65-69, 72-75, and 77-79 are pending and under consideration.

Claims canceled and added

New claims 80 to 82 are added. Claims 61, 63 and 64, are canceled without prejudice or disclaimer. Accordingly, after entry of this amendment 43, 46, 47, 51, 52, 55, 56, 65 to 69, 72 to 75, and 77 to 82 will be pending and under consideration.

Support for the claim amendments

Support for the amended and new claim can be found throughout the specification; for example, support for claims encompassing methods of selection, where the selection process can be is a positive or a negative selection process, or can comprise both a positive and a negative selection, can be found inter alia on page 9, second full paragraph, of the specification. Accordingly, the amended and new claims present no new matter and the amendment can be properly entered.

Species election

In response to the species election, Applicants elected (1) a method of forming a library where step (a) includes enriching at least one organism; (2) a method where step (b) includes enriching for at least one nucleic acid marker; and (3) a method where step (b) includes isolating genomic DNA.

Applicants respectfully request rejoining of the withdrawn species after a finding that the elected species are allowable.

Summary of the Rejections

Claims 43, 46, 47, 51-53, 65-69, 72-75, and 77-79 are rejected under 35 U.S.C. § 112, second paragraph. Claims 43, 46, 51, 52, 55, 56, 65-69, 72-75, and 77-79 are rejected under 35 U.S.C. § 102(a) as allegedly anticipated by Stein et. al. (1996) J. of Bacteriol. Vol 178:591-599 (hereinafter "Stein"). Claims 43, 46, 47, 51, 52, 55, 56, 65-69, 72-75, and 77-79 are rejected under the non-statutory obviousness-type double patenting over claims 1 to 14 of co-owned U.S. Patent 6,001,574 and over claims 1 to 6 of U.S. Patent 5,763,239.

Applicants respectfully traverse all objections to the specification and rejections of the claims.

Issues Under 35 U.S.C. § 112

Claims 43, 46, 47, 51-53, 65-69, 72-75, and 77-79 are rejected under 35 U.S.C. § 112, second paragraph as allegedly being indefinite and for the reasons stated on pages 2-3 of the OA.

The instant amendment to the claims addresses these issues; accordingly, the rejection under 35 U.S.C. § 112, second paragraph, can be properly withdrawn.

Issues Under 35 U.S.C. § 102(a)

Stein, et al.

Claims 43, 46, 51, 52, 55, 56, 65-69, 72-75, and 77-79 are rejected under 35 U.S.C. §102(a) as allegedly anticipated by Stein for the reasons stated on pages 3-4 of the OA.

However, Stein is clearly distinguishable from the claimed methods, and the instant amendment clarifies the distinguishing features. Stein isolates, clones and/or amplifies nucleic acids from uncultivated, unmanipulated organisms (Stein uses prokaryotes). For example, see the first sentence of the first paragraph, column one, of page 592, of Stein: "[i]n an effort to obtain additional information on marine planktonic archaea, and to avoid uncertainties and limitations imposed by PCR amplification or cultivation approaches, we attempted to archive and stably propagate large fragments of genomic DNA from these as yet uncultivated prokaryotes."

In contrast, the methods of this invention first - before isolating, selecting, cloning and/or amplifying nucleic acids - make a derived organism sample from an initial heterogeneous organism sample by: (1) subjecting all or a part of an initial heterogeneous organism sample to a method of selection, or (2) recovering a fraction of the initial heterogeneous organism sample having at least one desired characteristic; or (3) performing in any order both (i) subjecting all or a part of the initial heterogeneous organism sample to a method of selection, and (ii) recovering a fraction of the initial heterogeneous organism sample having at least one desired characteristic. Stein does not subject all or a part of their initial heterogeneous organism samples to a method of selection before archiving and stably propagating large fragments of genomic DNA from these as yet uncultivated or manipulated prokaryotes. Stein does not recover a fraction of an initial heterogeneous organism sample having at least one desired characteristic before archiving and stably propagating large fragments of genomic DNA from these as yet uncultivated or unmanipulated prokaryotes.

Furthermore, after subjecting all or a part of an initial heterogeneous organism sample to a method of selection, and/or (2) recovering a fraction of the initial heterogeneous organism sample having at least one desired characteristic, the instant claimed methods also comprise forming a derived nucleic acid library such that the proportional representations of the constituents in the derived nucleic acid library are adjusted to advantage by performing in any order, and at least one time, a step comprising: (i) subjecting all or a part of the initial nucleic acid sample to a period of selection, (ii) recovering a fraction of the initial nucleic acid sample having at least one desired characteristic, and (iii) assembling all or a part of the derived nucleic acid sample into a nucleic acid library.

Accordingly, the rejection under section 102(a) can be properly withdrawn.

Non-statutory Double Patenting Rejection

Claims 43, 46, 47, 51, 52, 55, 56, 65-69, 72-75, and 77-79 are rejected under the non-statutory obviousness-type double patenting over claims 1 to 14 of co-owned U.S. Patent 6,001,574 and over claims 1 to 6 of U.S. Patent 5,763,239; as discussed on pages 4 to 6, of the OA.

While Applicants respectfully traverse, to expedite prosecution and allowance of this application, they submit herewith a terminal disclaimer to obviate the obviousness-type double patenting rejections over the two cited patents. Accordingly, the non-statutory obviousness-type double patenting rejection can be properly withdrawn.

CONCLUSION

In view of the above Amendment and Remarks, after entry of this amendment, each of the presently pending claims in this application will be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejections of the claims under 35 U.S.C. § 112, second paragraph, and 35 U.S.C. § 102(a), and the non-statutory obviousness-type double patenting rejection, to pass this application to issue.

In the event the U.S. Patent and Trademark Office determines that an extension and/or other relief is required, Applicants hereby petition for any required relief including extensions of time and authorize the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 50-0661** referencing **docket no. D1270-3US**. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Applicants have respectfully requested a telephonic interview at the Examiner's convenience after entry and consideration of this RCE amendment.

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Respectfully submitted,

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